



Engineering & Computer Science BITS

LES INGÉNIEURS DOIVENT MONTRER LA VOIE DANS LE DOMAINE DE L'ENVIRONNEMENT

Ottawa, le 15 novembre 1993. <<En matière de problèmes environnementaux, peu importe la responsabilité qu'on veut faire porter aux ingénieurs, ce sont certainement eux qui sont les mieux placés pour trouver des solutions, parce qu'ils connaissent parfaitement les technologies et les procédés qui sont à la source d'un grand nombre de ces problèmes>> a affirmé M. Hector Jacques, président de Jacques Whitford Group de Dartmouth en Nouvelle-Écosse, cabinet d'ingénieurs spécialisé dans les questions environnementales.

Au cours d'une allocution qu'il a prononcée devant un groupe d'éminents ingénieurs lors de la réunion semestrielle du Conseil canadien des ingénieurs tenue à Ottawa. M. Jacques a affirmé que depuis trop longtemps les ingénieurs s'en tiennent leur rôle traditionnel <<d'exécutants de projets>>; ils doivent maintenant prendre la tête, intervenir dans le processus décisionnaire et lancer des projets. <<Pour remplir leurs engagements en matière de santé et de sécurité du public, les ingénieurs n'ont d'autre choix que de participer davantage au processus politique sous-jacent aux grands projets.>>

M. Jacques a mis l'accent sur le fait qu'il faut avoir recours à une approche multidisciplinaire pour trouver les vraies solutions. <<Il y a quinze ans, si on m'avait dit que trois archéologues ferait partie de mon personnel, j'aurais éclaté de rire>> a-t-il affirmé. <<Pourtant, c'est actuellement le cas.>> Cependant, M. Jacques continue à penser que, dans la plupart des cas, les ingénieurs sont les mieux qualifiés pour diriger les équipes. <<Pour que le public continue à avoir une opinion favorable de la profession, les ingénieurs doivent montrer qu'ils sont prêts à assumer une plus grande responsabilité à l'égard des projets qu'ils mettent en branle>>, a-t-il ajouté.

M. Jacques considère aussi que le nouveau rôle de l'ingénieur est essentiel au bien-être économique. Selon lui, <<on ne peut tolérer que la peur entretenue fasse avorter des projets viables. Les ingénieurs ont la crédibilité voulue pour rassurer la population, lui faire comprendre qu'ils ont fait leurs devoirs et que de nouveaux problèmes ne risquent pas de surgir.>>

Gilles Le Breton
Conseil Canadien des Ingénieurs

RESCHEDULING OF EXAMINATIONS

As a result of the
cancellation of
examinations
scheduled on
Thursday, December
9th, 1993 at 14h00 in
the Hall building,
please note that these
examinations have all
been rescheduled for
**Saturday, January 8th,
1994 at 14h00.**

Examinations will be
held in the same
rooms scheduled for
December 9th.

-Examinations Office

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EVENTS OF NOTE

* Teams from the Engineering and Computer Science Association (ECA) will take part in Mount Sinai Hospital's Anti-Smoking Snow Sculpture Contest on January 16th. This is the first time that teams from universities other than McGill have been invited to participate this event.

* On Monday, December 6th the Dean's Office, in conjunction with the ECA, distributed white ribbons throughout the Sir George Campus as part of the national White Ribbon Campaign. The campaign was initiated in 1991 to show men's solidarity with women in the struggle to counter the rising incidence of violence against women.

* Also on December 6th all proceeds collected by Campus Ministry from ribbons put on the Christmas tree were donated to women's shelters.

* In February, undergraduate Engineering and Computer Science students from all four Montreal universities (Concordia, Ecole Polytechnique, Ecole de Technologie Supérieure and McGill) will once again donate a whole day to the benefit of local women's shelters. The students will paint, clean, erect walls and perform other maintenance which is needed by the shelters.

* The ECA is now posting job listings relevant to their students on the bulletin boards outside their offices on the eighth floor of the Hall building.

Concordia's Automated Response Line (CARL) Comes On-Line

(This article is reprinted from the November 1993 issue of Viva Voce with permission of Lorraine Toscano, Editor.)

On December 13th, CARL will be put to the test for the first time. On that day both undergraduate and graduate students can begin to call CARL for their grades in the courses they took in first term.

Using a touchtone telephone, students will simply call CARL and, after entering their student I.D. number and P.I.N. (Personal Identification Number) correctly, they will hear their grades spoken in descending order. This means that the last grades submitted will be the first ones spoken. Moreover, only courses that actually have grades will be available so that DNE's and DISC's, for example, will not be listed. If a student is not registered for any first-term courses, or if none of the student's grades are known at the time of the call, CARL will know that too and will pass the information along!

The grade enquiry system is considered to be the "pilot project" for CARL. The introduction of grade reporting as the first application is a different approach from most other uni-

versities who have developed a voice response system. Grade enquiry was chosen for the pilot phase by the Telephone Registration Development Committee because the function is relatively easy while at the same time, it will provide a thorough test of the system as it will use a large number of telephone lines and will have a high volume of transactions between the voice response unit and the host computer. Also, if problems do arise, the system can be taken down and fixed with only minor inconvenience to the students since the current grade enquiry terminals in the Hall and Administration buildings will still be in place.

The Telephone Registration Development Committee is very excited about the launch of the grade enquiry system. We feel it will prove to be a valuable service to students and we are confident it pass the test with flying colours!

To learn more about CARL call Leslie Becskei at 848-3059.

If you want to learn your grades from CARL the number to call is 275-2275 (ASK CARL.)

UNDERGRADUATES HEAD WEST

While the rest of us are still recovering from the overindulgence that accompanies the holiday season, four of our undergraduates will be heading west to get a quick start on 1994. Alain Ackad (Industrial), Mark Fazio (Building), Len Podgurny (Building) and Kim Rokas (Electrical and Computer) will attend the 26th Canadian Congress of Engineering Students (CCES), this year hosted by the University of Calgary. The topic of the '94 conference will be **Ingenuity: Engineering in the 21st Century**. Students will meet with each other and industry representatives to discuss the future of the engineering profession, quality of engineering education and other areas of interest, such as the environment. The delegates to CCES will take advantage of the proximity of the Rockies by spending January 8th at a skiathon in Banff, the proceeds of which will be donated to the Canadian Foundation for Literacy. CCES also serves as the back drop for a meeting of YES (Youth in Science and Engineering) the national body of science and engineering summer camps. Concordia will be represented at YES by the director of REACH '93, Sandra Fornester (Computer Science).

Faculty Faces

Don MacMillan - Technical Writing

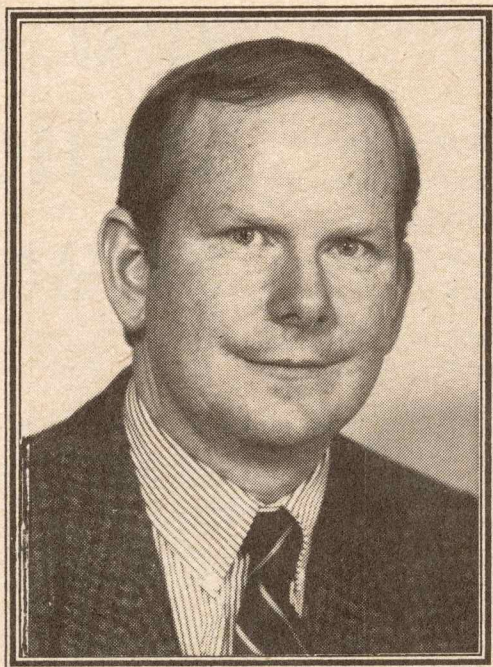
Faculty Faces is a regular feature of Bits, focusing on personalities within Engineering and Computer Science.

Don MacMillan does not feel he is teaching technical writing as much as technology transfer, "Industry places a great deal of importance on communications skills.

Our graduates are judged not only on their technical competence, but also on their ability to translate their specialized knowledge to meet the specific needs of a client who often has little or no knowledge of the subject." But getting first year students to think about clients they will meet four years down the road is often difficult. "It can," he says, "be hard for students to accept that an excellent piece of writing which goes over the head of its intended audience is not an excellent piece of writing." Similarly, writing that is simplistic or lacks an appropriate level of professionalism can spell disaster for a young professional starting her or his career. That is why one of the things stressed in Technical Writing (ENCS 281) is identifying and being sensitive to the audience.

Concordia has traditionally drawn on the expertise of professionals from outside the university to lecture on a part-time basis. During the day Prof. MacMillan is the Registrar at Marianopolis College, as he has been for the past five years. He has taught an evening course in technical writing at Concordia for the last twelve years. Both Concordia and society have changed significantly in the time he has

worked here and, he says, his teaching and course content have adjusted to reflect those changes. His students now learn about communicating in a multi-cultural



environment where attention has to be given to the needs of people whose first language is not English. "I tell my students to try to be cautious with the use of idiomatic expressions. Idiom does not translate well." As an example he uses the phrase, "I'm in hot water", and points out that it just

does not work in French, let alone any of the other native tongues a client may have. "Again, it comes back to being sensitive to your audience."

Changes in industry which are often viewed in a negative light have underlined the need for undergraduates to develop communication skills, "With a PC on every desk and corporate down-sizing, professionals are increasingly asked to produce their own work at every stage of a project. Engineers can no longer rely on having clerical support to clean up their language." In class he underlines the importance the ability to communicate can have on career advancement in economically uncertain times. "Companies now hire people who can fill many requirements, not just a few. The paperwork aspect of a project is often the only part a client will see. Therefore, employers

need people who can produce a polished product."

Gender also plays a role in Prof. MacMillan's classes, "We encourage students to use gender inclusive language. With the increased participation of women in the labour force, professionals can no longer assume that they are only writing to men." He believes the increasing presence of women students over the years has helped sensitize their male colleagues to be more receptive to ideas like gender inclusive language. But, he, like many others, believe there is still a lot of work to be done to make applied science professions more attractive to women. "At Marianopolis, women make up more than half of our science enrollment, yet surprisingly few of them choose engineering for future studies."

Being an administrator, Prof. MacMillan enjoys the student contact of teaching, and feels that it is important not to lose touch with the realities of the classroom. He says that while he covers a huge amount of material in thirteen weeks, it is very rewarding. "There is a discernable improvement from the writing level shown in the diagnostic test administered in the first lecture, to the writing level shown in the final exam. That improvement makes all the work worthwhile."

CORRECTION

In the last issue of *Bits*, in the page 1 photograph, Dr. Tien Bui was identified as Vice-Rector Academic. Dr. Bui is, in fact, an Associate Vice-Rector Academic. *Bits* apologizes to Dr. Bui and Dr. Rose Sheinen for the misprint.

On your mark, get set ... Slide!

In the early seventies some engineering students in Alberta decided to make a reinforced concrete slab that would survive a trip down the slopes of the Canadian Rockies. In 1994, students from across Canada, the United States and parts of Europe will meet, for the twentieth time, to compete in the what is now known as the Great Northern Concrete Toboggan Race. As is fitting for a major anniversary, the event will return to its origins in the foothills of the Rockies, to be hosted by the University of Alberta in Edmonton. The theme for this year's competition is the Grand Prix.

Concordia's team, Brickies 500, is made up of six Building students: Hélène Barrette, Maria Cinquino, Dominique Godin, Rowena Haines, Aurore Khoury and Anne-Marie Lemieux. (Brickies is European slang for building engineers which Maria picked from a friend from England.) It is the fourth team from this university to compete. They are still in the design phase of the project, and will be building the sled, to racing car specs, over the Christmas break. In keeping with the Grand Prix theme, the team members will wear pit crew uniforms with patches representing their sponsors during the race. Sponsorship this year has been a little more difficult than in previous years, as the race has been held locally for a while. But, in order to spread the financial burden of competing, it was decided at last year's race to alternate the competition between the East (the Maritimes, Quebec and Ontario) and the West (Mantioba, Saskatchewan, Alberta and B.C.). "It is really more fair," says Maria, "unfortunately, we just have to come up with a few more sponsors." The team already has sponsors for materials (Lafarge Canada Inc.) and transportation of the toboggan (Godin Transport), but is still looking for money to help get them to Alberta.

When they do get to Edmonton, they will spend three days in competition. The first two are devoted to technical competition, to be held in the University of Alberta Butterdome. Teams will be judged on variety of topics include technical presentation and concrete mix. On the third day - The Main Event. At a still undisclosed location, the students will make two runs down a mountain, each on a different track. Each run is timed with penalty seconds being added for excess weight, and things such as contact between team members and the snow. The team's final placing in the competition will be determined by a combination of the technical and race performances.

More information about the Great Northern Concrete Toboggan Race is available from Maria Cinquino at 7408.

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